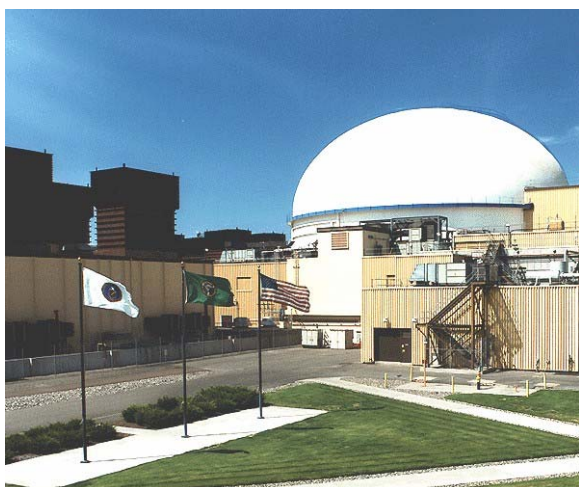


Fast Flux Test Facility Closure Project And Advanced Reactor Transition Program

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*Fast Flux
Test
Facility*



Solid Waste Cask

*Nuclear Energy Legacies:
337 High Bay*



Plutonium Recycle Test Reactor:
309 Building

Overview

The mission of the Fast Flux Test Facility (FFTF) Closure Project, Project Baseline Summary (PBS) RL-CP04, is to deactivate and decommission the FFTF.

The Advanced Reactor Transition (ART) Program, PBS RL-RC03, consists of the Nuclear Energy (NE) Legacies and the 309 Building/Plutonium Recycle Test Reactor activities.

NOTE: Unless otherwise noted, all information contained herein is as of the end of September 2003.

TOP FY 2003 ACCOMPLISHMENTS

FFTF Closure Project (PBS RL-CP04)

Secondary Sodium Drain: Secondary loop sodium was drained to the Sodium Storage Facility (SSF). Drain of the third of three loops was completed on April 16, 2003. One SSF tank was filled with approximately 49,000 gallons of sodium, which is now frozen. The final stage of draining was to remove 2,000 gallons of sodium from the secondary side of each of the three intermediate heat exchangers (IHXs). This involved cutting the normal IHX piping and installing a dip tube extending to the bottom of the IHX while maintaining an inert atmosphere in all three IHX's. The IHX drain was completed on September 17, 2003.

Fuel Offload: A significant accomplishment was made with the loading of seven Interim Storage Casks (ISCs), and delivery of three ISCs to the Plutonium Finishing Plant (PFP). The third ISC was shipped to PFP on September 25, 2003. Before fuel assemblies are loaded into the ISC, they are washed in the Sodium Removal System to remove sodium deposits, and then thoroughly dried. Each ISC holds up to seven fuel assemblies in dry, above-ground storage. Efforts to ship five additional ISCs to PFP are ongoing. FH anticipates successful completion of milestone PI-S3-4b (Fuel Offload – 81 assemblies) by the due date of January 22, 2004.

Solid Waste Cask (SWC): After several years of effort by the FFTF staff to redesign and build an improved SWC hoist system, the SWC was repaired with a new hoist system and controls. The SWC passed all acceptance and readiness tests and was successfully turned over to Operations for unrestricted use on May 22, 2003.

Bottom Loading Transfer Cask (BLTC): The BLTC is one of the major fuel transfer machines that are critical to maintaining the FFTF critical path for fuel offload. In August 2003, the BLTC suffered a grapple drive system failure. The recovery of this machine involved multiple disciplines and nearly every organization at FFTF. The repair and recovery was completed on September 2, 2003, after slightly more than two weeks, resulting in minimal impact to the fuel offload schedule.

ART Program (PBS RL-RC03)

NE Legacies Deactivation: Cleaning of residual sodium from the 50,000 gallon 3718-M sodium storage tank was completed using a water-vapor nitrogen process followed by two water rinses.

NOTABLE SEPTEMBER ACCOMPLISHMENTS

FFTF Closure Project (PBS RL-CP04)

Fuel Offload: The loading and delivery of two ISCs to the PFP was completed. This effort supported a DOE "Gold Metric" performance measure, and was completed five days ahead of the accelerated schedule. The Fuel Offload activities directly support a FH Performance Incentive, which is presently on track to complete on or ahead of schedule.

IHX Secondary Sodium Drain: Secondary sodium left in the three IHXs following drain of the secondary loops last April was transferred to the secondary sodium storage tank (T-44). Approximately 3,000 gallons of sodium was then transferred from T-44 to the primary sodium storage tank (T-43) for use next spring in flushing of the two in-containment sodium loops. The sodium remaining in T-44 (approximately 6,900 gallons) was then transferred to the SSF, leaving the storage tank with only a small, un-drainable residual. This completed all secondary sodium drain activities. The secondary sodium storage tank and associated drain lines have thus been cooled to ambient conditions. A low-pressure inert gas blanket will be maintained on the secondary sodium systems until the sodium residuals are removed at a later time.

ART Program (PBS RL-RC03)

NE Legacies Deactivation: Preparations for contractor cleaning of the Composite Reactor Component Test Activity vessel continued. Installation of six-inch diameter vent piping was approximately 50% complete. The contractor's cleaning procedure, Safety Plan, and Chemical Management Plan were reviewed with only minor required changes noted.

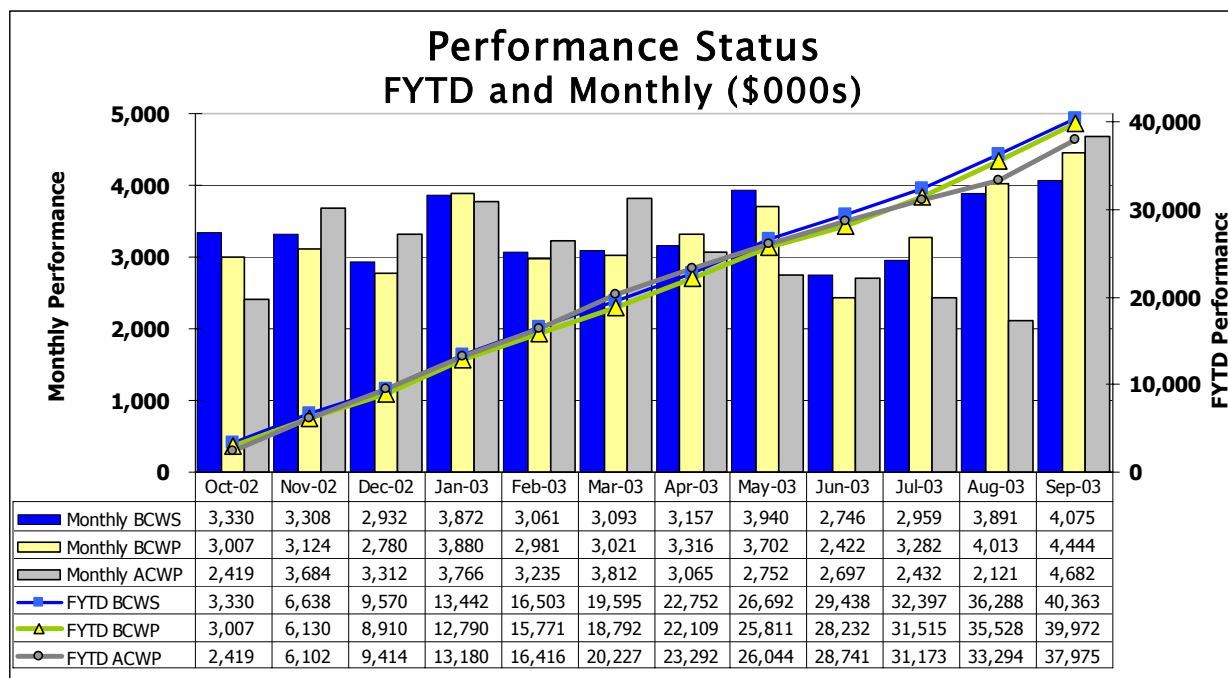
FY 2003 SCHEDULE / COST PERFORMANCE (\$000)

	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
RL-CP04 FFTF Project	38,152	37,761	36,453	-391	-1%	1,308	3%	38,152
RL-RC03 Advanced Reactor Transition	2,210	2,210	1,522	0	0%	688	31%	2,210
Total ART and FFTF	40,363	39,972	37,975	-391	-1%	1,996	5%	40,363

NOTE: Numbers are rounded to the nearest \$K.

Schedule Performance (-\$391K/-1%): The schedule variance is within the established threshold.

Cost Variance Analysis (+\$1,996K/5%): The favorable FFTF cost variance is due to underruns in labor and contracts. There was also an overhead and services rate variance distribution credit-to-cost of \$948K. The favorable ART cost variance is due to efficiencies in the NE Legacies sodium tank cleaning activities.



MILESTONE ACHIEVEMENT

Number	Milestone Title	(TPA/DNSFB/PI)	Due Date	Actual Date	Forecast Date	Status/Comments
PI-S3-4a	Secondary system sodium drain	PI	5/31/03	4/16/03		Complete
PI-S3-4b	Fuel Offload - 81 assemblies	PI	1/22/04		1/22/04	In progress
M-81-12	Initiate FFTF sodium drain	TPA	6/30/03	4/7/03		Complete
M-20-29B	Submit sodium storage facility and sodium reaction facility closure plan or request for procedural closure to Ecology as defined in Agreement section 6.3.3.	TPA	6/30/03	6/12/03		Complete

FY 2003 FH FUNDS VS FORECAST (\$000)

	Funding Received	Actual Cost	Variance
RL-CP04 Fast Flux Test Facility	\$ 38,184	\$ 36,453	\$ 1,731
RL-RC03 Advanced Reactor Transition	\$ 2,294	\$ 1,522	\$ 772
Total	\$ 40,478	\$ 37,975	\$ 2,503